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10/814,431	03/30/2004	Alexei Kojenov	SJO920030085US1	5731

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EXAMINER
DAYE, CHELCIE L

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>22 May 2008</u>.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-3 and 5-12</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-3 and 5-12</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

1.   This action is issued in response to applicant's RCE filed May 22, 2008.

2.   Claims 1-36 are presented. No claims added and claims 4 and 13-36 are

cancelled.

3.   Claims 1-3 and 5-12 are pending.

4.   Applicant's arguments filed May 22, 2008, have been fully considered but they

are not persuasive.

Continued Examination Under 37 CFR 1.114

5.   A request for continued examination under 37 CFR 1.114, including the fee set

forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this

application is eligible for continued examination under 37 CFR 1.114, and the fee set

forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action

has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 25,

2008 has been entered.

Claim Rejections - 35 USC § 102

6.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7.   **Claims 1, 3, and 5-8 are rejected under 35 U.S.C. 102(b) as being anticipated
by Cannon (US Patent No. 6,098,074) issued August 1, 2000.**

Regarding Claim 1, Cannon discloses a data management method,

comprising:

backing up contents of a source device at a first client station as at least

one object of a database stored in a data storage subsystem wherein the at least

one object represents an image of the contents of the source device (column 13,

lines 50-67 and columns 16-17, lines 55-67 and 1-14, respectively, Cannon) and

wherein the contents of the source device includes a plurality of files and a file

directory of the source device (column 4, lines 41-46 and column 7, lines 8-12,

Cannon);

using the database, tracking attributes and location of the at least one

object in the database (column 7, lines 53-64 and column 9, lines 31-41,

Cannon);

using the at least one object, restoring the contents of the source device

from the at least one object to a target file in a file system stored on a storage

device so that the target file contains said contents of the source device (column

14, lines 1-13 and column 17, lines 18-44, Cannon), wherein said file system

comprises a plurality of files and an address table identifying the location of each

file on said storage device (column 4, lines 41-46, Cannon); and

copying the restored contents of the source device from the single target

file to a target device so that the target device contains the contents of the source

device (column 14, lines 41-67, Cannon).

Regarding Claim 3, Cannon discloses the method wherein the target file

contains the complete contents of the source device (column 17, lines 6-14,

Cannon).

Regarding Claim 5, Cannon discloses the method wherein the data

storage subsystem includes a server coupled to the first client station by a

network (column 4, lines 9-20, Cannon).

Regarding Claim 6, Cannon discloses the method further comprising,

using the at least one object, restoring the contents of the source device from the

at least one object to a target device so that the target device contains the

contents of the source device (column 14, lines 1-13 and column 17, lines 18-44,

Cannon).

Regarding Claims 7 and 8, Cannon discloses the method wherein the

source raw storage device is a logical volume of at least one magnetic disk drive

(column 4, lines 59-62, Cannon).

Claim Rejections - 35 USC § 103

8.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

9.   Claims 2, 9, and 11 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Cannon (US Patent No. 6,098,074) filed October 29, 1997, in

view of Maurer (US Patent Application No. 20030065780) filed September 27, 2002.

Regarding Claim 2, Cannon discloses all of the claimed subject matter as

stated above. However, Cannon is silent with respect the target file being stored

on storage media at a second client station. On the other hand, Maurer discloses

the target file being stored on storage media at a second client station ([0108-

0109], Maurer). Cannon and Maurer are analogous art because they are from the

same field of endeavor of data restoration. It would have been obvious to one of

ordinary skill in the art at the time of the invention to incorporate Maurer's

teachings into the Cannon system. A skilled artisan would have been motivated

to combine in order to store the needed data on an alternate location, such that

if/when one location fails the needed data is not lost, but instead located

elsewhere. As a result, allowing for a better recovery system.

Regarding Claim 9, the combination of Cannon in view of Maurer, disclose the method wherein the source raw storage device is a partition of a magnetic disk drive ([0053], Maurer).

Regarding Claim 11, the combination of Cannon in view of Maurer, disclose the method wherein said target file is a flat file ([0074], Maurer).

10.   **Claims 10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cannon (US Patent No. 6,098,074) filed October 29, 1997, in view of Maurer (US Patent Application No. 20030065780) filed September 27, 2002, and further in view of "Logical vs. Physical File System Backup", By: Hutchinson, Published: 1999; referred to hereinafter as 'Hutchinson'.**

Regarding Claim 10, the combination of Cannon in view of Maurer, disclose the method further comprising mounting the source device ([0079], Maurer). However, Cannon in view of Maurer, are silent with respect to the source device being a read only device wherein write operations to said source device are prevented during said backing up of said source device. On the other hand, Hutchinson discloses the source device being a read only device wherein write operations to said source device are prevented during said backing up of said source device (pg.3, column 2, 1st full paragraph, Hutchinson). Cannon,

Maurer, and Hutchinson are analogous art because they are from the same field

of endeavor of system backup/restore. It would have been obvious to one of

ordinary skill in the art at the time of the invention to incorporate Hutchinson's

teachings into the Cannon and Maurer system. A skilled artisan would have been

motivated to combine as suggested by Hutchinson at pg. 2, column 2, in order to

provide system history and increase resilience to disasters, which means that it is

important that the format used to store data must be archival in nature. As a

result, maximizing the speed for data backup and minimizing the resources that

are used in performing the backup.

Regarding Claim 12, the combination of Cannon in view Maurer, and

further in view of Hutchinson, disclose the method wherein said copying uses the

UNIX dd command (pg.3, 2nd full paragraph, lines 5-9, Hutchinson).

Response to Arguments

Applicant argues, Cannon does not teach,"using the at least one object,

restoring the contents of the source device from the at least one object to a target

file in a file system stored on a storage device so that the target file contains said

contents of the source device [wherein the content of the source device includes

a plurality of files and a file directory of the source device]", as required by

claim1.

Examiner respectfully disagrees. Cannon teaches a "Client Restore" operation wherein "*a client station requests the subsystem to restore one or more user files from a backup copy maintained on the storage hierarchy. Presumably, a client station initiates a client restore operation as a result of destruction, loss, or other damage to user files*" (see col.14, lines 1-13). The preceding excerpt clearly identifies the teaching of restoring the contents of the source device from the at least one object on a storage device. Cannon further teaches the use of "File Aggregation" and "managed" files, wherein "*One of the key features of the present invention is storage use of "managed" files, each comprising an aggregation of one or multiple constituent "user" files. The "user" files are created by the client stations, and managed by the subsystem as a service to the client stations...In particular, the subsystem treats each managed file as a single file during backup, move, and other subsystem operations, reducing the file management overhead to that of a single file*" (see cols.5-6, lines 63-67 and 1-9, respectively). The preceding excerpt further explains the aggregation of multiple files into one single file (i.e. managed file). Further explanations of creating the managed file and certain criteria for the creation of the managed files are disclosed within col.11, lines 1-61. Even further, Cannon discloses a "Managed File Copy", which copies a managed file from one location to another (i.e. from a source location to a target location) due to either a migration, restoration, or backup (see col.14, lines 41-63). Lastly, Cannon teaches "*the database contains information about the files contained in the storage hierarchy. This information, for example, includes the addresses at which files are stored, various characteristics of the stored data, certain client-specified data management preferences, etc.*" and "*The source column lists a location in the client station where the user file is stored locally by the client. As a specific example, a user file's source may comprise a directory in the client station.*" (see col.4, lines

41-46 and col.7, lines 8-12). The preceding excerpt identifies the source device (i.e., the

client) containing user files and the source comprising a directory for the files. Thereby,

disclosing that the content of the source device includes a plurality of files and a file

directory of the source device.

Applicant argues, the examiner has cited no portion of the Maurer

reference which teaches that such a flat file contains the restored contents of a

source device wherein the contents of the source device includes both a plurality

of files and a file directory of the source device as required by claims 1 and 11.

Examiner respectfully disagrees. In response to applicant's arguments against

the references individually, one cannot show nonobviousness by attacking references

individually where the rejections are based on combinations of references. See *In re*

Keller, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091,

231 USPQ 375 (Fed. Cir. 1986). In particular, primary reference Cannon was relied

upon for the disclosure of the restored contents of a source device wherein the contents

of the source device includes both a plurality of files and a file directory of the source

device (see the action above). While the Maurer reference was incorporated solely for

the teaching of a target file being a flat file. As such, Maurer does in fact disclose the

recited feature within dependent claim 11, wherein a map of the logical information to

physical devices on the source computer is created in the form of a flat file. Then, the

map is used to build a substantially identical logical configuration on the target

computer. Since the system allows for the information to be created and stored in the

form of a flat file and the flat file format along with the information is backed up from the

source computer to the target computer. When the restoring process occurs, the

information that has been backed up is still within the flat file formation and is therefore

manipulated as such. Also, as an alternative example, paragraph [0102] of the Maurer

reference, further disclose using the flat file to map the volume information from one

computer system to another. Again, since the information being mapped is within a flat

file when the process of backing up the system and restoring the system occurs

(paragraphs [0103] and [0110]) the information is maintained in the flat file format.

Points of Contact

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to CHELCIE DAYE whose telephone number is (571)272-

3891. The examiner can normally be reached on M-F, 7:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Apu Mofiz can be reached on 571-272-4146080. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

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you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Chelcie Daye
Patent Examiner
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July 28, 2008

/Apu M Mofiz/
Supervisory Patent Examiner, Art Unit 2161